

REMARKS/ARGUMENTS

Claims 1-21 are pending in this application.

Claims 1, 3, 4, 6, 7, and 21 have been amended to remove the term "group" to make even more abundantly clear that residues V, W, X and Z together comprise at least two residues which have Formula IIa (i.e., two of the entirety of Formula IIa). Applicants have made this amendment despite Applicants' belief that the Examiner has misinterpreted the word "group" to include sub-portions of Formula IIa and not the entire Formula IIa. Applicants' interpretation is supported at least by Examples 2, 4, and 6 which include two residues which have Formula IIa.

Specification

The specification has been amended to insert the heading "BRIEF DESCRIPTION OF THE DRAWINGS" after paragraph [0022] of the published application (US 2007/0060497).

The specification has also been amended to delete paragraphs [0080]-[0086] of the published application (US 2007/0060497) and insert the heading and deleted paragraphs after paragraph [0022]. Paragraphs [0080]-[0086] are related to the description of the drawings. Insertion of the heading and deleted paragraphs [0080]-[0086] of the published application after paragraph [0022] is consistent with the previous insertions of section headings in the Amendment dated September 25, 2008 and provides the required sections in the order specified by 37 C.F.R. § 1.77(b).

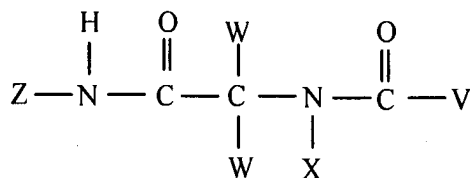
Rejections of Claims 1-2, 13-14, and 21 under 35 U.S.C. § 102(b)

The claims are not anticipated by Rathore et al.. The cited reference simply does not teach or suggest having at least two residues having Formula IIa as claimed. Moreover, the cited reference does not include a compound having R_1 as claimed. Applicants explain their reasoning in greater detail below.

The amended pending claims require that residues V, W, X and Z together comprise at least two residues having formula (IIa) $(R_1-(CH_2-CH_2-O)_n-CH_2-CH_2)$, where R_1 is H, hydroxy

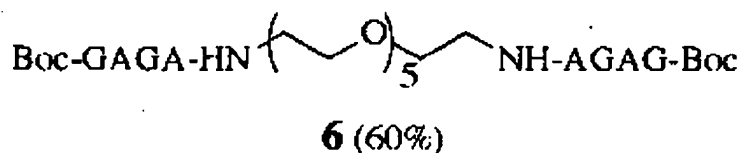
or a hydrocarbon residue which has from 1 to 10 carbon atoms and which can contain heteroatoms. A review of the formulas disclosed in Rathore et al. clearly shows that Rathore et al.'s formulas do not have even one residue having formula IIa, including R₁, as claimed. This is illustrated in detail in below.

The Examiner states that the Formula 6 of Scheme 1 of Rathore et al. corresponds to formula Ia of the pending claims. Formula Ia as claimed is reproduced below:

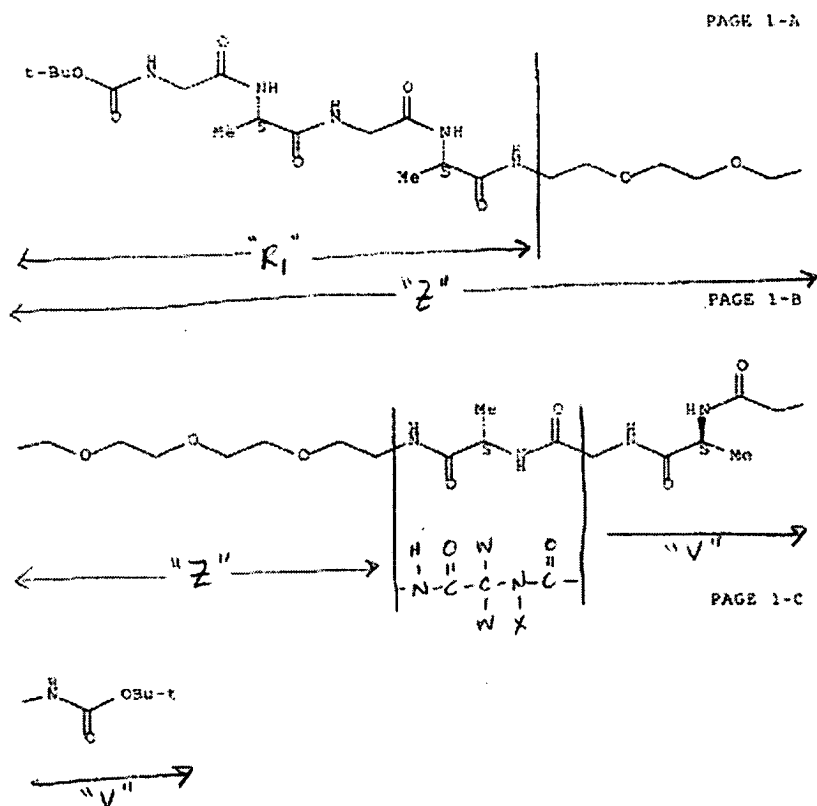


Formula Ia

For purposes of comparison, Formula 6 of Scheme 1 of Rathore et al. is reproduced below:



The Examiner kindly provided a more detailed structure of Formula 6 at page 6 of his Office Action. Applicants' attorney has marked up the structure to show how Rathore et al.'s Formula 6 best corresponds to formula (1a) of the pending claims. The marked up structure is provided below:



The above markings are provided so that the Examiner can better understand the arguments made by Applicants in reference to the structure.^{1,2} Discussing the structure without a visual aid is difficult and it is possible that the Examiner and Applicants are misunderstanding each other's arguments. The above markings should not be interpreted to mean that Applicants agree that any or all of the structure of Rathore et al. corresponds to the claimed Formula Ia. Instead, Applicants are merely demonstrating the closest correspondence of Rathore et al's formula with the claimed compound for purposes of comparison and, ultimately, to show that

¹ Applicants note, however, that the Examiner's structure includes what appear to be sulfur atoms which are labeled "S." Applicants do not know the origin of these "S" atoms. However, for purposes of the analysis herein, the outcome of our analysis is the same regardless if the atoms labeled "S" are carbon or sulfur.

² Applicants note that "Boc-GAGA" of Rathore et al.'s Formula 6 corresponds to "t-BuO-CO-" of the structure provided by the Examiner.

Rathore et al.'s formula does not teach or suggest the claim limitations. For example, a portion of the structure above is labeled "R₁." Applicants do not agree that this portion of the structure meets the requirements of R₁ as described in the claims. Instead, Applicants are simply labeling the structure to show the portion of the Rathore et al. structure which best approximates the location of what would have to be considered "R₁" based on the location of adjacent portions of the formula. Applicants provide detailed comments below showing why these labeled portions of the Rathore et al. formula do not meet the claim limitations. If the Examiner disagrees with the above markings, Applicants respectfully request that the Examiner provide a similar marked-up structure so that Applicants can better understand the Examiner's arguments about the cited reference.

The Examiner states that "Z" corresponds to A-HN(CH₂-CH₂-O)₅-CH₂-CH₂-NH-AGAG-BOC of Rathore et al.'s formula 6 of Scheme 1 at page 357. Applicants respectfully submit that this cannot be correct. Specifically, "A-HN" should not be included in "Z" as shown in the marked up formula above. The Examiner also states that R₁ includes the second alanine side chain (CH-CH₃-C-O-NH). Applicants respectfully submit that this is also incorrect, as shown in the marked up formula above.

As claimed, formula (IIa) is (R₁-(CH₂-CH₂-O)_n-CH₂-CH₂). Therefore, R₁ must be located adjacent (CH₂-CH₂-O)_n-CH₂-CH₂). Rathore et al.'s formula 6 includes the following: Boc-GAGA-HN-(CH₂-CH₂-O)₅-CH₂-CH₂-NH-AGAG-Boc. Solely because of its position adjacent - (CH₂-CH₂-O)₅-CH₂-CH₂, the portion of Rathore et al.'s formula underlined above (Boc-GAGA-HN-) best corresponds to the portion labeled "R₁" of formula IIa. However, as defined in the pending claims, R₁ is H, hydroxy or a hydrocarbon residue which has from 1 to 10 carbon atoms. As explained in more detail below, the Boc-GAGA portion of Rathore et al.'s formula has more than 1 to 10 carbon atoms. It should be noted that "Boc-GAGA" corresponds to *N*-*tert*-butoxycarbonyl-Gly-Ala-Gly-Ala. Therefore, Boc-GAGA includes the 10 carbons from the two Ala "A" residues (3 carbons each, or 6 carbons combined) and two Gly "G" residues (2 carbons), as well as the 5 carbons from the "Boc" group having the following structure: (CH₃)₃-C-O-CO-. Therefore, Boc-GAGA provides 15 carbons, and therefore cannot meet the limitation

of "where R₁ is H, hydroxy or a hydrocarbon residue which has from 1 to 10 carbon atoms" as claimed.

In reference to R₁, the Examiner further asserts that the claims use the open term "having" so the phrase "hydrocarbon residue which has from 1 to 10 carbon atoms" is not interpreted as "consisting of 1 to 10 carbon atoms." The Examiner seems to ignore that the claim limitation "from 1 to 10 carbon atoms" is a defined range, which, by the very nature of it being a range, the number of carbons shown in the cited reference must fall on or between the lower and upper end of the range in order to anticipate the pending claims. This is simply not shown in the Rathore et al. reference. As shown above, the cited reference does not disclose a range which touches or even overlaps the claimed range.

The Examiner seems to suggest that the closed term "consisting of" should be used to exclude more than 10 carbons. Applicants are not aware of any requirement to use the term "consisting of" when claiming a range. Applicants certainly do not see such a requirement in MPEP § 2131.03, which discusses "Anticipation of Ranges." Moreover, adding "consisting of" to the limitation would require atomic carbon and would not include hydrocarbons as claimed. In other words, if the claim was amended to "hydrocarbon residue consisting of from 1 to 10 carbons," such phrase would necessarily exclude hydrogen atoms, which is certainly not intended. Applicants respectfully submit that the Examiner is improperly interpreting the word "has" to ignore the limitations of the claimed range. Applicants respectfully request that the Examiner reconsider this rejection. Therefore, Applicants decline to amend the wording of the claims to limit the range to "consisting of."

Second, the claims require two residues having Formula IIa. While Rathore et al.'s Formula 6 includes one portion having the structure $-(CH_2-CH_2-O)_5-CH_2-CH_2-$, this structure does not appear twice and does not include R₁ as required by the claims. Rathore et al. clearly does not include two of formula IIa. Rathore et al. does not have even one residue of formula IIa as claimed and clearly does not have two residues of formula IIa as claimed. This limitation is clearly not met by the cited reference.

In the Office Action at page 8, the Examiner asserts that the instant rejection is using

structure 6 as shown in chart 1 at page 353 of Rathore et al. (which is reproduced below):

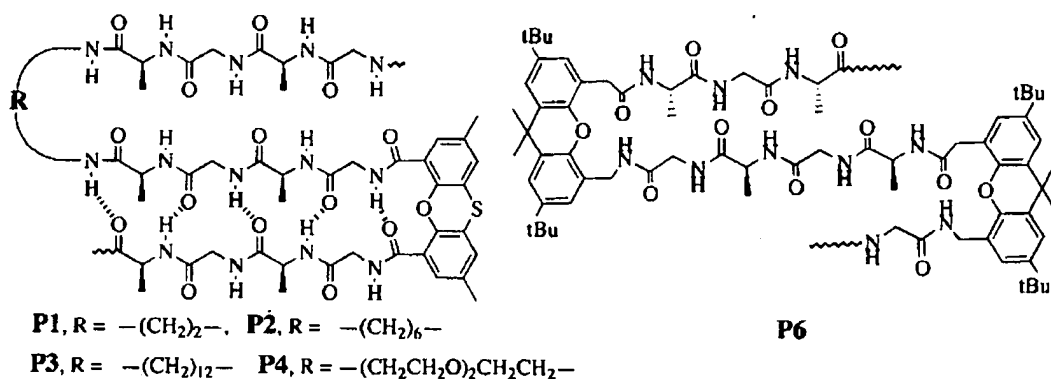


Chart 1.

Applicants do not understand the argument being made by the Examiner. P6 of Rathore et al. does not include a structure corresponding to Formula (IIa) as claimed. Specifically, Applicants do not see anything in P6 of Rathore et al. corresponding to $R_1-(CH_2-CH_2-O)_n-CH_2-CH_2$. There are certainly not at least two Formula (IIa) as claimed. Therefore, P6 of Rathore et al. cannot anticipate the pending claims.

Applicants respectfully submit that Rathore et al. clearly does not anticipate the pending claims.

Rejoinder of Claims

Applicants respectfully reiterate their previous request for rejoinder of non-elected claims. The claims as amended are appropriate for rejoinder as all compounds now claimed in 1-20 are united by a common inventive concept, namely the compounds and/or method of preparing compounds comprise at least two formula IIa which is not disclosed in the cited reference.

Application No. 10/559,996
AMENDMENT B
Reply to Office Action of January 16, 2009

The Commissioner is hereby authorized to charge any additional fees which may be required in this application under 37 C.F.R. §§ 1.16-1.17 during its entire pendency, or credit any overpayment, to Deposit Account No. 06-1135.

Respectfully submitted,
FITCH, EVEN, TABIN & FLANNERY

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